



**APPENDIX A**  
**"Clean" Version of Each Paragraph/Section/Claim**  
**37 CFR 1.121(b)(ii) AND (c)(i)**

**CLAIMS (with indication of amended or new):**

12. (Amended) A reference signal transmission method in a cellular system using a code division multiple access (CDMA) scheme of transmitting N (N is a positive integer) reference signals whose transmission signals are known in advance by using N pilot channels, and transmitting M (M is a positive integer) pieces of information by using M data channels, the method comprising:

making each of said M data channels dynamically correspond to one or a plurality of said N pilot channels.

**APPENDIX C**  
**“Clean” Version Without Amended/New Indications**  
**37 CFR 1.121(c)(3)**

1. A cellular system using a code division multiple access (CDMA) scheme, comprising:

N (N is a positive integer) pilot channels for transmitting reference signals whose transmission signals are known in advance; and

M (M is a positive integer) data channels for transmitting information; wherein each of said M data channels is made to dynamically correspond to one or a plurality of said N pilot channels.

2. A system according to claim 1, wherein each of said N data channels is made to correspond to one of said M pilot channels which goes through the same transmission path.

3. A system according to claim 1, wherein said pilot channel is used for coherent detection of at least said data channel to which said pilot channel corresponds.

4. A system according to claim 1, wherein said pilot channel is used for transmission power control on at least said data channel to which said pilot channel corresponds.

5. A system according to claim 1, wherein a correspondence between said pilot channel and said data channel is newly determined at least immediately before and every time said data channel is used.

6. A system according to claim 1, wherein a correspondence between said pilot channel and said data channel can be changed during use of said data channel by notifying a new correspondence.

7. A system according to claim 1, wherein said pilot channel stops transmission when use of all data channels made to correspond to said pilot channel is terminated.

8. A system according to claim 2, wherein when a pilot channel which goes through the same transmission path as that for a data channel to be newly used is not being used for transmission, a new pilot channel which goes through the same transmission path as that for said data channel is generated and used to start transmission.

9. A system according to claim 1, wherein when channels used for transmission/reception with the same antenna directivity are determined as channels which go through the same transmission path.

10. A system according to claim 2, wherein when channels used for transmission/reception with the same antenna directivity are determined as channels which go through the same transmission path.

11. A cellular system using a code division multiple access (CDMA) scheme, comprising:

transmission means having N (N is a positive integer) pilot channels;  
transmission/reception means having M (M is a positive integer) data channels;

antenna means having L (L is a positive integer) types of directivity patterns; and

notification means for dynamically notifying a correspondence between said data channels and said pilot channels,

wherein information to be transmitted/received by using each of said M data channels is transmitted/received by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication,

a reference signal to be transmitted by using each of said N pilot channels is transmitted by selecting one pilot channel for each directivity pattern used for said data channel, and

said notification means notifies a pilot channel used for transmission with the same directivity pattern as that for said data channel.

12. A reference signal transmission method in a cellular system using a code division multiple access (CDMA) scheme of transmitting N (N is a positive integer) reference signals whose transmission signals are known in advance by using N pilot channels, and transmitting M (M is a positive integer) pieces of information by using M data channels, the method comprising:

making each of said M data channels dynamically correspond to one or a plurality of said N pilot channels.

13. A reference signal transmission method in a cellular system using a code division multiple access (CDMA) scheme of transmitting reference signals by using N (N is a positive integer) pilot channels, transmitting/receiving information by using M (M is a positive integer) data channels, performing transmission/reception by using said data channels through antenna means having L (L is a positive integer) types of directivity patterns, and dynamically notifying a correspondence between said data channels and said pilot channels through notification means, comprising the steps of:

transmitting/receiving information to be transmitted/received by using each of said M data channels by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication;

transmitting a reference signal to be transmitted by using each of said N pilot channels by selecting one of said pilot channels for each directivity pattern which is being used on said data channel; and

causing said notification means to notify a pilot channel which is being used for transmission with the same directivity pattern as that for said data channel.

14. A base station apparatus in a cellular system using a code division multiple access (CDMA), comprising:

N (N is a positive integer) pilot channels for transmitting reference signals whose transmission signals are known in advance; and

M (M is a positive integer) data channels for transmitting information, wherein each of said M data channels is made to dynamically correspond to one or a plurality of said N pilot channels.

15. A base station apparatus in a cellular system using a code division multiple access (CDMA) scheme, comprising:

transmission means having N (N is a positive integer) pilot channels;  
transmission/reception means having M (M is a positive integer) data channels;

antenna means having L (L is a positive integer) types of directivity patterns; and

notification means for dynamically notifying a correspondence between said data channels and said pilot channels,

wherein information to be transmitted/received by using each of said M data channels is transmitted/received by selecting an optimal pattern from the L types of directivity patterns in accordance with a position of a mobile terminal used for communication,

a reference signal to be transmitted by using each of said N pilot channels is transmitted by selecting one pilot channel for each directivity pattern used for said data channel, and

Application No.: 09/260,903

Docket No.: S1905.0080/P080

said notification means notifies a pilot channel used for transmission with the same directivity pattern as that for said data channel.